

Attorney/Client Privilege

MEMORANDUM

SUBJECT: Justification to Issue Notice of Violation
to USG Interiors, Inc.

FROM: Daniel Schaufelberger, Environmental Scientist
Air Enforcement and Compliance Assurance Section (MI/WI)

THRU: Sarah Marshall, Section Chief
Air Enforcement and Compliance Assurance Section (MI/WI)

TO: John Matson, Associate Regional Counsel
Office of Regional Counsel

EPA determined, through atmospheric dispersion modeling, that sulfur dioxide (SO₂) emissions from USG's two mineral wool cupolas (Cupola's #1 and #2) and two blow chambers (Blow Chambers #1 and #2), cause exceedances of the 1-hour average NAAQS for SO₂ over an extensive offsite area surrounding the Red Wing Plant. The highest 4th highest (modeling equivalent of 99th percentile) modeled 1-hour average off-site SO₂ concentration, using 5 years of meteorological data, was 1,120 µg/m³. The revised national primary ambient air quality standard for SO₂ is 196 µg/m³ based on a 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour concentrations.

The Minnesota SIP at Minn. R. 7009.0020 states that "no person shall emit any pollutant in such an amount or in such a manner as to cause or contribute to a violation of any ambient air quality standard beyond such person's property line, provided however, that in the event the general public has access to the person's property or portion thereof, the ambient air quality standards shall apply in those locations." Therefore, USG violated Minn. R. 7009.0020 since it is causing an exceedance of the 1-hour average SO₂ NAAQS.

The Red Wing, Minnesota facility produces mineral wool (used to make such products as ceiling tiles) by melting a composite of slag and stone in its two operating metallurgical coke-fired cupolas. The melted product is directed to its two blow chambers where it is spun and blown into wool fibers. No add-on SO₂ control devices currently exist at the Red Wing Plant.

EPA discovered this SIP violation through a dispersion modeling analysis using facility-specific information provided to EPA in three Section 114 information requests (issued April 8, 2009, August 13, 2009, and July 30, 2015) as well other modeling parameters provided to EPA by the Minnesota Pollution Control Agency.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mike Hill, Plant Manager
USG Interiors, LLC.
27384 Highway 61 Boulevard
Red Wing, Minnesota 55066

Re: Notice of Violation
USG Interiors, LLC.
Red Wing, Minnesota

Dear Mr. Metcalf:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to USG Interiors, Inc. (USG or you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). EPA finds that USG has violated the Minnesota State Implementation Plan at its Red Wing, Minnesota facility.

Section 113 of the Clean Air Act gives EPA several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

EPA is offering USG an opportunity to confer about the violations alleged in the NOV. The conference will give USG an opportunity to present information on the specific findings in the NOV, any efforts USG has taken to comply, and the steps USG will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. USG may have an attorney represent it at this conference.

The EPA contact in this matter is Daniel Schaufelberger. You may call him at (312) 886-6814 to request a conference. You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Katie Koelfgen, Minnesota Pollution Control Agency

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

USG Interiors, LLC.
Red Wing, Minnesota

Proceedings Pursuant to
the Clean Air Act
42 U.S.C. §§ 7401 *et seq.*

NOTICE OF VIOLATION

EPA-5-15-MN-03

NOTICE OF VIOLATION

The U.S. Environmental Protection Agency (EPA) issues this Notice of Violation (NOV or Notice) to USG Interiors, Inc. (USG), for violations of the Clean Air Act (the Act), 42 U.S.C. §§ 7401 *et seq.*, at its mineral wool production facility at 27384 Highway 61 Boulevard, Red Wing, Minnesota.

EPA issues this Notice pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1). The authority to issue this Notice has been delegated to the Regional Administrator of EPA Region 5 and re-delegated to the Director of the Air and Radiation Division, Region 5.

Statutory and Regulatory Background

1. The Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. *See* Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

National Ambient Air Quality Standards

2. Pursuant to Sections 108 and 109 of the Act, 42 U.S.C. §§ 7408 and 7409, on June 22, 2010, EPA revised the primary National Ambient Air Quality Standards (NAAQS) for sulfur dioxide (SO₂) to provide increased protection of public health with an adequate margin of safety; especially for children, the elderly and those with asthma. *See* 75 Fed. Reg. 35520 (2010).
3. The revised national primary ambient air quality standard for SO₂ is 75 parts per billion (ppb) (196 µg/m³) based on a 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour concentrations. *See* 40 C.F.R. § 50.17.

Minnesota SIP

4. Section 110(a) of the Act, 42 U.S.C. § 7410(a), establishes a program by which states prepare and submit for approval to EPA plans to provide for the attainment and maintenance of the National Ambient Air Quality Standards. Once EPA approves a state's submission, it becomes part of the federally enforceable State Implementation Plan (SIP).
5. On May 24, 1995, EPA approved Minnesota Rule Chapter (Minn. R.) 7009.0020 as part of the federally enforceable Minnesota SIP. *See* 60 Fed. Reg. 27411 (1995).
6. The Minnesota SIP at Minn. R. 7009.0020 states that no person shall emit any pollutant in such an amount or in such a manner as to cause or contribute to a violation of any ambient air quality standard beyond such person's property line, provided however, that in the event the general public has access to the person's property or portion thereof, the ambient air quality standards shall apply in those locations.

Findings of Fact

7. USG is a corporation authorized to do business in Minnesota, and thus USG is a "person," as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
8. At all times relevant to this Notice, USG owned and operated emission units at its mineral wool production facility at 27384 Highway 61 Boulevard, Red Wing, Minnesota (Red Wing Plant).
9. Cupola #1, Cupola #2, Blow Chamber #1, and Blow Chamber #2 are SO₂ emission sources at the Red Wing Plant.
10. There are no add-on SO₂ emissions control devices associated with the emissions from Cupola #1, Cupola #2, Blow Chamber #1, and Blow Chamber #2 at the Red Wing Plant.
11. USG provided EPA with information responsive to Section 114 information requests EPA issued to USG on April 8, 2009, August 13, 2009, and July 30, 2015, concerning, among other items, stack test results, and facility-specific production, fuel, and air pollution emissions data, (USG's Data).
12. Utilizing SO₂ emissions data from representative stack tests conducted at the Red Wing Plant on September 20, 2011, September 26-27, 2012, September 10-11, 2013, and September 17-18, 2014, and dispersion model parameters supplied by the Minnesota Pollution Control Agency, EPA conducted atmospheric dispersion modeling of SO₂ emissions from the Red Wing Plant (Red Wing SO₂ Modeling) using 5 years of the most recently available representative meteorological data.

13. The Red Wing SO₂ Modeling determined that the peak value of the highest 4th highest (modeling equivalent of 99th percentile) modeled 1-hour average off-site SO₂ concentration was 903 µg/m³ (compared to the SO₂ NAAQS of 196 µg/m³). The modeling results indicate that the SO₂ emissions from the Red Wing Plant resulted in NAAQS exceedances over an extensive offsite area surrounding the Red Wing Plant.

Violation

14. USG violated the Minnesota SIP at Minn. R. 7009.0020 by emitting SO₂ from the Red Wing Plant into the atmosphere in Minnesota in such an amount as to cause or contribute to ambient SO₂ concentrations in excess of the NAAQS for SO₂ of 196 µg/m³.

Enforcement Authority

15. Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of an applicable implementation plan, regulation, or permit.
16. Pursuant to 40 C.F.R. § 52.23, any person failing to comply with an approved regulatory provision of a SIP is subject to an enforcement action under Section 113 of the Act, 42 U.S.C. § 7413.

Date

George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Kathy Jones, certify that I sent a Notice of Violation, No. **EPA-5-14-MN-03** by Certified Mail, Return Receipt Requested, to:

Mike Hill, Plant Manager
USG Interiors, LLC.
27384 Highway 61 Boulevard
Red Wing, Minnesota 55066

I also certify that I sent copies of the Notice of Violation by first class mail to:

Katie Koelfgen
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155-4194

on the ___ day of _____, 2015.

Kathy Jones
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: _____

MEMORANDUM

SUBJECT: Recommendation to Issue a Notice of Violation
to USG Interiors, Inc.

FROM: Sara Breneman, Chief
Air Enforcement and Compliance Assurance Branch

TO: George T. Czerniak, Director
Air and Radiation Division

I recommend that you issue a Notice of Violation (NOV) to USG Interiors, Inc. (USG) for violating a provision of the Minnesota State Implementation Plan (SIP).

Specifically, EPA determined through atmospheric dispersion modeling that from 2010 to the present, sulfur dioxide (SO₂) emissions from USG's two mineral wool cupolas (Cupola's #1 and #2) and two blow chambers (Blow Chambers #1 and #2), caused exceedances of the 1-hour average NAAQS for SO₂ over an extensive offsite area surrounding the Red Wing Plant. The highest 4th highest (modeling equivalent of 99th percentile) modeled 1-hour average off-site SO₂ concentration, using 5 years of meteorological data, was 1,120 µg/m³. The primary NAAQS for SO₂ is 75 ppb (196 µg/m³) based on a 5-year average of the 99th percentile of the annual distribution of daily maximum 1-hour concentrations.

The Minnesota SIP at Minn. R. 7009.0020 states that "no person shall emit any pollutant in such an amount or in such a manner as to cause or contribute to a violation of any ambient air quality standard beyond such person's property line, provided however, that in the event the general public has access to the person's property or portion thereof, the ambient air quality standards shall apply in those locations." By exceeding the 1-hour average SO₂ NAAQS at its Red Wing Plant, USG violated the Minnesota SIP at Minn. R. 7009.0020.

USG's Red Wing, Minnesota Facility produces mineral wool (used to make such products as ceiling tiles) by melting a composite of slag and stone in its two operating metallurgical coke-fired cupolas. The melted product is directed to its two blow chambers where it is spun and blown into wool fibers. No add-on SO₂ control devices currently exist at the Red Wing Plant.

EPA discovered this SIP violation through a dispersion modeling analysis using facility-specific information provided to EPA in three previous Section 114 information requests, as well other modeling parameters provided to EPA by the Minnesota Pollution Control Agency

Attachment

State Representative Contacted: _____

Date: _____

By: _____